

Claims

1. The use of an isolated nucleic acid molecule comprising a sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3 to detect or monitor cancer.
2. The use of a nucleic acid probe which is capable of hybridising under high stringency conditions to an isolated nucleic acid molecule comprising a sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3 to detect or monitor cancer.
3. A method of detecting or monitoring cancer comprising the step of detecting or monitoring elevated levels of a nucleic acid molecule comprising a sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3 in a sample from a patient.
4. A method of detecting or monitoring cancer comprising the use of a nucleic acid molecule or probe according to claim 1 or claim 2 in combination with a reverse transcription polymerase chain reaction (RT-PCR).
5. A method of detecting or monitoring cancer comprising detecting or monitoring elevated levels of a protein or peptide comprising an amino acid sequence encoded by a nucleic acid sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3.
6. A method according to claim 5 comprising the use of an antibody selective for a protein or peptide as defined in claim 5 to detect the protein or peptide.
7. A method according to claim 7 comprising the use of an Enzyme-linked Immunosorbant Assay (ELISA).

8. Use or method according to any one of claims 1 to 7, wherein the cancer is a gastro-intestinal cancer.
9. A kit for use with a method according to any one of claims 3-8 comprising a nucleic acid, protein or peptide, or an antibody as defined in any one of claims 3-8.
10. A method of prophylaxis or treatment of cancer comprising administering to a patient a pharmaceutically effective amount of nucleic acid molecule comprising a nucleic acid sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3 or a pharmaceutically effective fragment thereof.
11. A method of prophylaxis or treatment of cancer comprising administering to a patient a pharmaceutically effective amount of a nucleic acid molecule hybridisable under high stringency conditions to a nucleic acid molecule comprising a nucleic acid sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3 or a pharmaceutically effective fragment thereof.
12. A method of prophylaxis or treatment of cancer comprising administering to a patient a pharmaceutically effective amount of a protein or peptide comprising an amino acid sequence encoded by a nucleic acid sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3 or a pharmaceutically effective fragment thereof.
13. A method of prophylaxis or treatment of cancer comprising the step of administering to a patient a pharmaceutically effective amount of an antibody capable of specifically binding a protein or peptide comprising an amino acid sequence encoded by a nucleic acid sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3.

14. A method according to any one of claims 10 to 11, wherein the cancer is a gastro-intestinal cancer.

15. A vaccine comprising a nucleic acid molecule having a nucleic acid sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3 or a pharmaceutically effective fragment thereof and a pharmaceutically acceptable carrier.

16. A vaccine comprising a protein or peptide comprising an amino acid sequence encoded by a nucleic acid sequence selected from SEQ.ID.1, SEQ.ID.2 and SEQ.ID.3 or a pharmaceutically effective fragment thereof, and a pharmaceutically acceptable carrier.

17. An isolated mammalian nucleic acid molecule which codes for the following amino acid sequence:

MSRVVPGQFDDADSSDSENRLKTVKEKDDILFEDLQDNVNENG
EGEIEDEEEEGYDDDDDDWDWDEGVGKLAKGYVWNGGSNPQANRQTS DSSSAKMSTPA
DKVLRKFENKINLDKLNVTDSVINKVTEKSRQKEADMYRIKDKADRATVEQVLDPRTR
MILFKMLTRGIITEINGCISTGKEANVYHASTANGESRAIKIYKTSILVFKDRDKYVS
GEFRFRHGYCKGNPRKMVKTWAEKEMRNLIRLNTAEIPCPEPIMLRSHVLVMSFIGKD
DMPAPLLKNVQLSESKARELYLQVIQYMRRMYQDARLVHADLSEFNMLYHGGGVYIID
VSQSVEHDHPPHALEFLRKDCANVNDFMRHSVAVMTVRELFEFVTDP SITHENMDAYL
SKAMEIASQRTKEERSSQDHVDEEVFKRAYIPRTLNEVKNYERDMDIIMKLKEEDMAM
NAQQDNILYQTVTGLKKDL SGVQKVPALLENQVEERTCSDSEDIGSSECS DTDSEEQG
DHARPKKHTTDPDIDKKERKKMVKEAQREKRKNKIPKHVKKRKEKTAKTKKKGK

or a variant of a fragment thereof which encodes a prostate-associated antigen which is expressed in higher than normal concentrations in prostate cancer cells.

18. A vector comprising an isolated mammalian nucleic acid molecule according to claim 17.

19. A nucleic acid molecule comprising at least 15 nucleotides, the nucleic acid molecule being capable of hybridising to a molecule according to claim 17 under high stringency conditions.

20. An isolated protein or peptide comprising an amino acid sequence obtainable from a nucleic acid molecule according to claim 17, 18 or 19.